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ABSTRACT

This paper discusses the modern American junior high and middle school from the perspectives of an interested observer, the educational researcher, and the students themselves. Discussed briefly are three factors that place junior high/middle school education in a unique context--the developmental stage of the students who are served, the historical rationale for creating such schools, and the current move to establish "middle" rather than "junior high" schools. Next, examples are provided of the ways teachers, students, and subjects are organized in these schools. This is followed by a discussion of the academic and social maturity requirements students must meet in order to perform successfully in junior high/middle schools. Also described are types of teaching practices that have been observed to be most effective at this educational level. Demands that are placed on students as they move from elementary to junior high/middle schools are summarized, as is a theme that runs throughout the paper, involving three aspects of a student's instructional program: (1) nature of academic tasks; (2) socio-organizational structure of the classroom; and (3) management and accountability systems employed by teachers. (JM)

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THE YEARS BETWEEN ELEMENTARY SCHOOL AND HIGH SCHOOL: WHAT SCHOOLING EXPERIENCES DO STUDENTS HAVE?

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The history of the establishment of junior high and middle schools reveals a set of problems which has beset this educational level from its beginnings in the early years of the century when high dropout rate was the principal issue. These years represent a break in the flow of teaching/learning progression and present far less complicated academic and social demands on students than those found in the fifth and sixth grades.

The junior high/middle school years represent a step backward on a number of dimensions:

(1) Emphasis is on doing homework which is in large part unsupervised. No one, therefore, asks critical learning questions which characterize instruction at lower levels.

(2) The curriculum content in large part overlaps with that of earlier years. Students tend to view it as easy, and they are not challenged to think about it. A principal goal becomes how quickly it can be done so that the student can move on to something else.

(3) Because of the overlapping curriculum, student experience at this level is less complex cognitively than at lower levels. Gifted programs are even "more of the same thing." Students are generally not asked to adjust to many different types of teaching. The notion that one studies different topics differently comes through more in elementary school than it does in junior high/middle school.

(4) Implementation of educational theory at this level is beset by two radically different approaches. One holds that the retardation of brain growth during this period implies the provision of a safe, uncomplicated environment, while Piagetian theorists hold that such an environment generates boredom which interrupts the developmental process, both academically and socially.

A major feature of this level of instruction consists of the student's

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learning to function in the social system of the school external to the classroom. Developmental demands on the student are such that he or she requires time to work them out. The formation of junior high/middle schools was in large part a response to these demands which are even today not being addressed with sufficient sophistication. Many of the same factors which contribute to passivity at lower grades are present at this level, and even greater emphasis in dealing with non-participation is required.

Rule making and procedural clarity is crucial at this level. With it the path to addressing the shortcomings mentioned above is possible, as well as desirable. Without it passivity and the "do it as quickly as possible" syndrome will probably continue, as it does now, into high school.

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Introduction

The purpose of this paper is to describe the modern American junior high and middle school from the perspectives of the interested observer, the educational researcher, and the young men and women who spend one-third of their waking hours for some 180 days each year inside these educational institutions. We begin by providing a brief discussion of three factors that place junior high/middle school education in a unique context -- the developmental stage of the students who are served, the historical rationale for creating such schools, and the current move to establish "middle" rather than "junior" high schools. Then, we provide examples of the ways teachers, students, and subjects are organized in these schools. This is followed by a discussion of the academic and social maturity requirements students must meet in order to perform successfully in junior high/middle schools. Next we describe the types of teaching practices that have been observed to be

most effective at this level of education. Finally, building upon the above information, we summarize the demands that are placed on students as they move from elementary to junior high/middle schools.

Context in Which Junior High/ Middle School Education Takes Place

Lounsbury, Marani, and Compton (1980) estimated that on a given school day in 1977, five million seventh-graders attended school in America. Multiplying this number by the three or four grades typically placed in junior high/middle schools, one can surmise that some 15-20 million students currently are enrolled in these "in-between" schools. Because of the unique characteristics of the student age group that is served, the historical reasons for establishing such schools, and the current trend toward provision of a "middle" as opposed to a "junior" high school education program, the context in which these schools function differs markedly from that which surrounds elementary school or high school education. Key features of this context are described below.

Students, Ages 10-14

The Education Research Services (1977) brief summarizing research on middle schools describes sudents ages 10-14 as "inbetweenagers," "early adolescents," and "transescents." Eichhorn (1979) uses the term "transescence" to refer to "the stage of development that begins prior to the onset of puberty and extends through the early stages of adolescence" (p. 59). He notes that since puberty does not occur for all precisely at the same chronological age, "the transescent designation is based on many physical, social, emotional, and intellectual changes that occur throughout these developmental stages" (p. 59).

Lounsbury, et al. (1980) suggest that seventh-graders are representative of the sorts of youngsters one would find in a junior high or middle school. In portraying these students, they state:

> Describing "the" seventh-grader is an impossible task for seventh-graders come in many sizes and shapes, with a variety of ethnic and religious backgrounds, interests, likes and dislikes, and hopes for the future. Their stages of maturation are so varied; some are childlike without any outward indication of the rapid physical changes which will soon transform them into true adolescents. Others already possess mature physiques and are capable of producing children. Some are weathering the maturation process with ease, while others writhe and struggle like butterflies emerging from tattered cocoons . . . The seventh grade, therefore, is composed of students who represent a true paradox. These youngsters are alike mainly in their unlikeness, with differences not only from one another but within themselves, often from one day to the next. (p. 4)

Nonetheless, one can assume most students will undergo a similar set of developmental changes some time between ages 10 and 14. An obvious growth spurt will occur and secondary sexual characteristics will develop. The importance of peers will increase. Interactions with and acceptance by the peer group into which the student aspires to membership will receive high priority. Reliance on adult opinion and authority will decrease. Ability to deal with abstract as well as concrete concepts may occur, though Epstein and Toepfer (1978) challenge this view because of their own studies suggesting that brain growth slows between ages 12 and 14.

Consequently, middle and junior high schools serve students during an important and unsettled period in their lives. Providing appropriate learning programs for them when each differs markedly from the next in regard to his or her stage of development, is challenging -- to say the least. As Eichhorn (1979) suggests, they need the security of structure but with enough elasticity to explore learning and socialization in ways that are appropriate to their developmental needs. They require friendliness and encouragement on the part

of teachers, the principal, and other staff members. They respond to variety in their learning experiences. They function best in a school in which the "aura of learning" permeates the entire school.

The Birth of the Junior High School

Perhaps because of the unique characteristics of the 10-14 year old student, some 80 years ago the reasons given for creating junior high schools sounded remarkably similar to the program requirements taken from Eichhorn (above) and the middle school philosophy which will be discussed in the section that follows. For example, Briggs (1920) stated that:

- Isolated and small grammar and high schools are very impractical and uneconomical.
- Male teacher influence, while possible in a junior high school, is hard to obtain in an elementary school.
- A program or an organizational technique is needed to bridge the gap between the elementary and secondary years.
- The seventh and eighth grade organized in an 8-4 system makes provision for individual differences, educational guidance, and vocational guidance difficult. (pp. 4-20)

In 1918, the Commission on the Reorganization of Secondary Education described a junior high school as follows:

> In the junior high school there should be a gradual introduction of departmental instruction, some choice of subjects under guidance, promotion by subjects, prevocational courses, and a social organization that calls forth initiative and develops the sense of personal responsibility for the welfare of the group.

Charles W. Eliot, President of Harvard, provided impetus for the creation of junior high schools in speeches to the National Education Association (NEA) in 1888 and 1892 through his work as chairman of the Committee on Secondary School Studies. This committee, which became known as the Committee of Ten, was appointed by the Department of Superintendents of NEA. In a report published

in 1894, the Committee proposed that several subjects taught in high school, such as algebra, geometry, and foreign languages, be initiated in the last years of elementary school, or that elementary school be reduced to six years, which would provide a period of six years for secondary education (1894, p. 45).

John Dewey (1903) added to the discussion by stating that the elementary school was too long and the secondary school needed at least six years to do an adequate job of developing the cultural appreciation needed for competent citizenship.

Then, in 1904, Professor G. Stanley Hall's book, Adolescence, was published. This was among the more influential of several works regarding children in the 10-14 age range to appear at approximately the same time. Dr. Hall described the nature of adolescents and emphasized their individual differences. As Gruhn and Douglas (1971) note, "Professor Hall's contribution to an understanding of the adolescent as it related to the educational program had a significant influence in shaping the philosophy of the six-year program of secondary education and of the junior high school as a part of that program" (p. 38).

One other event that advanced the move to create junior high schools was a series of studies conducted by Professor C. M. Woodward of St. Louis University. Dr. Woodward, who also was president of the St. Louis Board of Education, concluded that withdrawal of students from school in St. Louis rose sharply after age 12. He noted that boys, in particular, "find the restraints of the schoolroom petty and very irksome. Many of the things they are required to do seem petty and trivial, and frequent repetitions make them intolerable" (1901, pp. 1364-74). He suggested that changes were needed in the education programs of students of this age.

The actual introduction of the junior high school as part of the education system in America is placed some where around 1910. Lipsitz (1977) states that the first such school was created in a laboratory school in Berkeley, California, in 1909. Hansen and Hearn (1971) say that PS #62 in New York City was converted to a grade 7 and 8 school in 1905. Sweat (1977) alleges that the first junior high school opened in Richmond, Indiana in 1910. Regardless, in response to criticism regarding school systems with 7-4, 8-4, or 9-4 grade patterns and the growing information about the unique characteristics of adolescents, by 1910 a new school had been created that was designed to improve the education program previously offered to students in the upper elementary and lower high school grades (Sweat, 1977, p. 5).

The Move to Middle Schools

During the period from 1910 to approximately 1960, the junior high school became a standard part of the education system. By 1940, a 6-3-3 grade level organization was utilized by many of the school districts in the nation. However, beginning about 1960, questions began to be raised regarding the junior high school. As Lipsitz (1977) stated, junior high schools were seen as "ill-conceived, watered-down high schools, plagued by a lack of fit between the schools' organization and their students" (p. 94). The confusion which earlier had surrounded the definition of an ideal school for early adolescents reappeared. Speaking about the dilemma that continues to exist to this day, Eichhorn (1979) notes, "There is no universally accepted prototype for an educational program for the transition school" (p. 68).

The move to create middle schools came in response to such concerns. Several discussions of the rationale for creating a middle school (for example, Education Research Service, Inc., 1977; Sweat, 1977; Gore, 1978) provide information about the characteristics that differentiate philosophically

cally between junior high schools and middle schools. They are:

- The middle school is child-centered, the junior high school is subject-centered.
- The middle school has a flexible schedule, the junior high school a six-period day.
- The middle school emphasizes learning how to learn, the junior high school focuses on acquisition of a body of knowledge.
- The middle school utilizes variable group sizes, the junior high school employs standard classroom groups.

Further, a summary of the work of Alexander (1971), Moss (1971), and Trauschke and Mooney (1972) appearing in an Education Research Services Brief (1977) suggests that an "ideal" middle school emphasizes guidance and human relations, de-emphasizes sophisticated social activities, individualizes instruction, offers a wide variety of exploratory courses and activities, uses interdisciplinary teaching teams, uses both elementary and secondary certificated teachers, has flexible scheduling, and gradually moves students from the self-contained classroom typical of elementary schools to departmentalization at the high school. Lounsbury, Marani, and Compton (1980) add several items to this list based on a 1977 study of seventh-grade in middle schools. They noted that most middle schools include a developmental skill program that provides both separate and contextual teaching of reading and related communication skills, a commitment to and plan for dealing with the affective aspects of education, recognition of the social needs of early adolescents, an activity/laboratory rather than a presentation/telling approach to instruction, and a comprehensive program of evaluation and reporting to parents.

However, the above descriptions are of "ideal" middle schools. Lounsbury, et al. (1980) also state:

> The middle school today, as one would expect, is still very much a mixed bag. There are hundreds of middle schools operating that are wholly departmentalized, homogeneously

> grouped, subject matter centered, and featuring interscholastic athletics. These schools display nearly all that typified what became the junior high school. On the other hand, there are many middle schools that operate in open spaces, that feature team teaching, extensive exploratory programs, adviser-advisee arrangements, and nearly all the theoretically acceptable practices. The vast majority, of course, are somewhere in between and cluster around the middle. (p. 65)

Hence, it seems that while the theoretical differences between a junior high school and a middle school are great, the actual, observable differences are fewer. McGlasson (1973) agreed. He found that course offerings in middle schools were essentially the same as in junior high schools with the possible exception that students were introduced to home economics and technical arts at a younger age. He also found that "some" middle schools included more team teaching, individualized instruction, and continuous progress program activities than junior high schools. Nonetheless, in 1982, nearly half the schools in the United States that serve early adolescent youngsters are identified as middle schools rather than junior high schools. The discussion that follows includes information regarding students' schooling experiences in both types of these schools.

Program Organization

Several patterns of grade-level organization have been identified in junior high/middle schools. In the Shadow Study of a seventh-grade day in a middle school (Lounsbury, et al., 1980), almost two-thirds of the schools included grades 6, 7, and 8. Thirteen percent included grades 7-8 and 12 percent, grades 5-8. A much earlier survey, completed in 1965 when the move to middle schools was just beginning, reported that 16 percent of the schools in the northeastern United States had changed from a grade 7-8-9 to a 6-7-8 or 5-6-7-8 system (Zdanowicz, 1965). Gore (1978) reported that in New England,

grade organizations of 6-7-8 and 5-6-7-8 accounted for 93.1 percent of the 315 middle schools that were surveyed. A recent survey of middle and junior high schools in the San Francisco Bay Area identified a predominance of schools with a grade 6-7-8 organization (69 percent), fewer that included grades 7-8-9 (25 percent), and less that housed grades 7-8 (6 percent). In addition, all the grade 7-8-9 schools in this survey were in the process of moving grade 9 to the high school and instigating a grade 6-7-8 or 7-8 plan.

Based on these data, it appears that removal of grade 9 from the junior high/middle school and the possible addition of grade 6 to the school is a growing practice. Reasons given by principals and other administrators for this change in grade level organization include noninstructional matters such as keeping a high school open, using a new school building, and aiding desegregration. Instruction-related reasons encompass providing more specialization in grade 6, remedying problems in the "old" 7-8-9 schools, and providing a program especially designed for the transescent student.

Within the above grade-level arrangements, middle and junior high schools vary widely in the ways the instructional program is organized. Most schools utilize a six-academic period day, plus lunch. Some move students from one teacher to another each period. Others keep fifth- or sixth-grade students with the same teacher for several periods. Still others assign students to several teachers for a block of time several periods in duration and allow teachers to determine how much of the time the students will spend in a given subject area. Underlying all these plans is a desire to make the students' transition from elementary to junior high/middle school as easy and successful as possible, and to facilitate the students' later move to a departmentalized high school. Providing more time with one, or a few, teachers is seen as a means for easing the move from working in a self-contained elementary class

to working with six different teachers each school day. Gradually introducing students to a six-period departmentalized program prior to the end of grade 8 (or grade 9, if included in the school) also is considered important.

The following examples of three junior high/middle school programs illustrate the ways students are assigned to teachers and subjects. They are taken from the Catalog of Bay Area Middle/Junior High/Intermediate Schools (Far West Laboratory, 1982).

School A (Middle School)

Grade 6. Students are assigned to five core teams of two teachers each. Assignment is based on language ability (beginning English, intermediate and advanced English, fluent English-speaking, Spanish bilingual, gifted and talented).

The sixth-grade schedule assigns first and second period to two of the four core subjects (language arts, math, social studies, and science). Lunch follows as third period. Fourth period the students take an elective subject. Periods 5 and 6 the students return to their core teachers. Period 7 is physical education.

Grade 7. Students are assigned to four learning-center teams made up of three teachers each. The teams teach language arts, math and social studies. Students are in the learning centers either the first or last three periods of the day. The other academic periods include science, an elective, and physical education. Students are assigned heterogeneously to the learning centers except for one center that serves the gifted students.

Grade 8. At the eighth-grade level sudents are assigned to a "cluster" of approximately 28 students. Each cluster moves together through a departmentalized program including English, math, social studies, science, an elective and physical education. Students are assigned to the clusters heterogeneously except for the "gifted" cluster.

School B (Middle School)

Grade 6. Students are assigned heterogeneously to the same teacher for a four-period "core" of English, reading, social studies, and math. They also take physical education and an exploratory sequence that includes one quarter of science, art, music, and practical arts. A pull-out remedial reading course is provided for some students during the English part of the core program.

Grade 7. This program includes a two-period "core" of English and social studies taught consecutively by the same teacher. Students are assigned to the core class heterogeneously, For math, students are

grouped by ability. They take remedial math, regular seventh-grade math, or pre-algebra classes. Physical education is required. One semester of science and one of reading are required. Students may take one elective course.

Grade 8. This program is the same as that offered in seventh grade. Algebra is offered to the advanced math students.

School C (Junior High School)

This school utilizes a rotating schedule in which a "red" day has the periods in consecutive order 1 through 6. A "blue" day begins with sixth period, then goes to 5, 3, 4, 2, and 1. At all grade levels, students are assigned to math, science, and English classes based on ability.

Grade 7. Students take English and reading from the same teacher in two consecutive periods. Math, physical education, geography/science, and an elective are each taken with different teachers.

Grade 8. The program is completely departmentalized. Required courses are English, math, physical education, U. S. history, life science/physical sciences. Students may select one elective.

Grade 9. Students now may choose two electives, Required courses are English, math, science/social studies (one semester each) and physical education.

In terms of the transition requirements imposed upon the students, it is clear that Schools A and B give more attention to providing a link between the self-contained elementary class and a totally departmentalized program than School C. In School C, one could expect students to find the beginning of the year more difficult than in Schools A and B because they must work with at least five different teachers as well as adapt to the rotating schedule.

In terms of transition to high school, all three schools phase students into a departmentalized program. The schools also emphasize an academic core that will build the basic skills necessary to succeed in high school. The area of weakness in the move toward high school, if there is one, is in the electives area. Most high school programs offer students a wide selection of possible courses from which to choose their individual course sequences. These junior high/middle schools provide students with limited practice

in selecting electives. It is difficult to conjecture whether choosing one, or two electives per year is sufficient preparation for making wise selections from among the diversity in course offerings the students will face when they reach high school.

One other feature of these programs that warrants special note is the extent to which students are grouped by ability for various subjects. The gifted and talented students in School A are separated from the other students throughout the three years of middle school. In Schools B and C, students are grouped by ability for math and in school C for several other subjects as well. Although such arrangements may be advantageous since able students will be challenged and have an opportunity to acquire new skills and knowledge and those who need to master basic concepts and skills will be given time to do so, they also may restrict peer interactions. As a result, some students in these schools may find it difficult to adjust to working with a broader range of students when they enter high school should they select courses which include students with diverse ability levels.

Academic and Social Maturity Requirements

The authors of this paper recently completed a Junior High School Transition Study in which we and our colleagues followed students from the sixth grade in four feeder elementary schools to seventh grade in a grade 7-8 junior high (Ward, et al., 1982; Rounds, et al., 1982; Mergendoller & Packer, 1982; and Mitman, et al., 1981). As part of this study, we observed the students as they entered and worked in their seventh grade classes during the first quarter of the school year. We interviewed students, teachers, and parents. We analyzed the data to determine what the junior high school experience was like for the students and to identify features of the instructional

program that appeared to help students make successful transitions. The discussion that follows builds from this study, using the research of others to highlight similar findings in other settings, point out discrepancies in findings, or help explain various aspects of the schooling experience. Throughout, we emphasize the perceptions, points of view, and generalized experiences of junior high/middle school students. We rely on their descriptions of junior high school to organize and provide section headings for our discussion.

"You Still Have to Do Work"

When one considers the format of the classroom tasks and the task-related cognitive demands which students confront in the typical junior high/middle school, there are few -- if any -- differences from those they faced as elementary students. Phil Jackson's (1968) observations about elementary school describe junior high schools equally well:

> The identifiable forms of classroom activity are not great in number. The labels: "seatwork," "group discussion," "teacher demonstration," and "question-and-answer period" (which would include work "at the board"), are sufficient to categorize most of the things which happen when class is in session. (p. 9)

The differences which do exist between the daily experience of elementary and junior high or middle school students generally concern the nature of the academic subjects which are available to students (e.g., in junior high/middle schools students may be able to pursue a foreign language, homemaking, industrial arts, music, etc.), rather than the manner in which students must participate within the class in order to learn the subject matter. Sometimes -- as in the case of laboratory sciences -- a different assignment format accompanies a new academic subject offering, but in general, the format of the classwork encountered and assignments completed by junior high/middle school students is

indistinguishable from that confronted by their friends a year behind in elementary school. Throughout the day, students "fill-in-the-blanks" in mimeographed worksheets prepared by a textbook publisher or the teacher, they watch the teacher give explanations at the board and answer questions directed to them, they participate in teacher-led (and very occasionally, student-led) discussions, they write phrases and sentences, occasional paragraphs and fewer essays, and they take weekly, monthly or grading period tests so that the teacher is able to assign them a grade. Classes, as one seventh-grader told us, are "just work, boring work." From the middle primary grades until the end of high school, our impression is that this work looks much the same.

Although one might be able to defend the repetitious nature of the assignments students are required to complete by arguing that a successful instructional format should be used as much as possible, we question the cognitive skills which are developed and reinforced by many assignments. Our analysis of the academic experience of students in a typical junior high school suggested that the early adolescents in this school were often required to take courses which were not optimally matched to their intellectual ability (for a fuller discussion, see Rounds, et al., 1982). Moreover, course content often did not follow the "structure of the discipline" approach advocated by curriculum theorists but focused on rote memorization -- or what Arnold (1982) calls the "Egypt-and-flax" approach. This was particularly the case for all students in the mathematics classes and for all but the highest achieving students in the other subject areas.

Consider, for example, the mathematics assignment sheet which appears as Figure 1. The computation skills required to complete the problems on the sheet are educational pabulum for all but the least able 12-13 year olds because, as will be discussed later, most students acquired these skills in

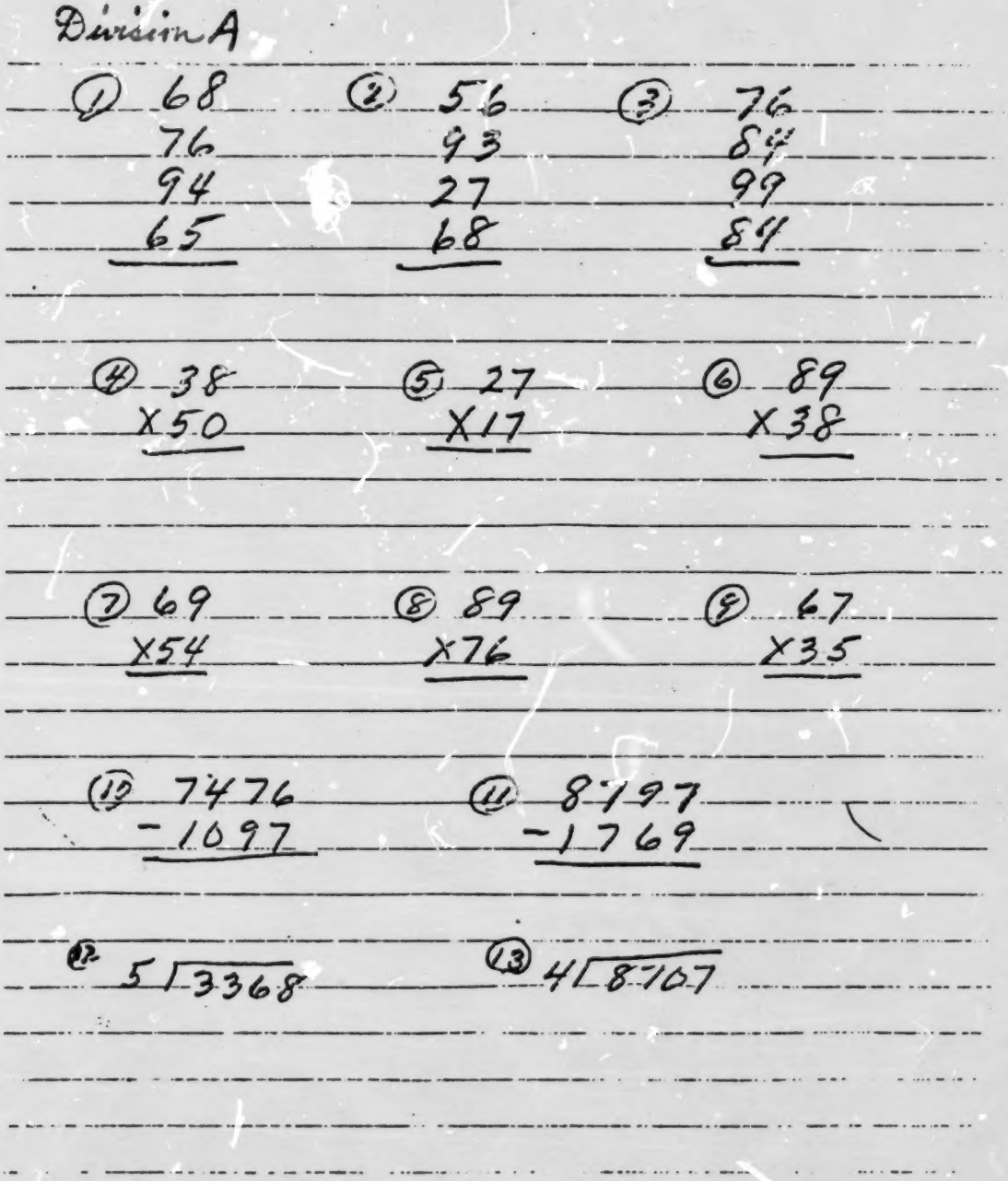

Figure 1. Example of mathematics assignment, Fall quarter of seventh grade

elementary school. When such assignments are given to all seventh-graders regardless of their ability levels, the work wastes instructional time which could be spent expanding many students' knowledge and ability.

Examination of the tasks required of students in other subject areas such as world history and English suggested that substantial numbers of seventh-graders were not being challenged to use the their developing cognitive capacities to think abstractly and apply multistep reasoning in these classes. Figure 2 presents a page that was excerpted from a seventh-grade world history test. It illustrates both the fact-recall and the multiple-choice features of many assignments completed by junior high/middle school students.

Figure 3 includes an example of an assignment given to the students in an advanced reading group in a seventh-grade English class. Interestingly, it contains a few questions which require more than a fact-recall response, e.g., "What thought is suggested by the last stanza?" "Do you think a change in outlook is an inevitable part of aging? Why or why not?" It suggests that high-achieving junior high/middle school students may be provided an educational program that is somewhat more complex than that offered other students.

From another perspective, the work assigned to the students not only appears to be uncomplicated in nature, it also seems to repeat information and skills many students covered in fifth and sixth grade. The Lounsbury, et al., (1980) study includes statements by students to the effect that they were "still doing things they did in fifth grade." As noted above, our study indicated this was particularly the case in math. Throughout the first quarter of the seventh grade, over 70 percent of the students were completing math computation problems or working with concepts they had learned in fifth or sixth

UNIT FIVE TEST

NAME_____

PERIOD _____

_____1. Which civilization developed farming

A. Egyptian C. Mesopotamian

B. Chinese D. Indian

_____ 2. The climate of Mesopotamia is

A. Polar C. Tropical

B. Temperate D. Equatorial

_____3. The soil is rich in Mesopotamia because of

A. Many plants C. Deserts

B. River deposits D. Ice Caps

_____4. Which two rivers run through the Mesopotamian valley

A. Indus and Ganges C. Amur and Lena

B. Yellow and Yangtze D. Tigris and Euphrates

_____5. What continent is Mesopotamia found in

A. Europe C. Africa

B. Asia D. Australia

_____6. The cities of Mesopotamia grew up where

A. In mountain passes C. Along rivers

B. Along trade routes D. At the Oasis sites

_____7. This development allowed men to stop wandering

A. The wheel C. Domesticated animals

B. Farming D. Better tools

_____8. The who lived first in cities

A. Sumerians C. Babylonians

B. Egyptians D. Amorites

_____9. The help of waterways to wet the soil for crops is called

A. Food flooding B. Irrigation

B. Fertilization C. Silting

Figure 2. Example page taken from seventh-grade world history test

PROJECTIONS #3
Study Questions

Beauty Is Truth, pgs. 34-41.

1. Describe the community in which Jeannie lives.
2. What kind of home life does she have?
3. How is Jeannie different from her friends?
4. What causes this difference?
5. What things does Jeannie write about?
6. Why doesn't Jeannie want to meet anyone after school after her composition has been read?

Death by Drowning, pg. 54.

1. What did the rescuers find in the canoe?
2. How was the youth's body recovered?
3. What does the poet call on music to do for the survivors?
4. What is the truth of death that friends are left to ponder?
5. Read the interview on page 55. On what facts did Eberhart base the poem?

old age sticks, pg. 69.

1. What, in general, are adults always saying to young people?
2. How do young people react to the advice of adults?
3. What then is the basic difference between the attitudes of youth and age?
4. What thought is suggested by the last stanza?
5. Do you think a change in outlook is an inevitable part of aging? Why or why not?

VOCABULARY Definitions due Wed. Spell/Vocab test Fri.

assuage	garish	cadence
aimless	encourage	dank
repugnance	repel	poignancy
dislodge	significant	subtle
irresolute	incomparable	rapt

WORD STUDY Analyze the underlined word in each sentence below. Tell what the root word is. Tell what each affix does to the meaning of the word.

1. Jeannie walked along the busy street, aimlessly looking in store windows.
2. The opening of the door dislodged a flake of green-painted plaster.
3. Miss Fisher had even been encouraging.
4. To Jeannie, the silence was unbearable.
5. Jeannie dropped a pencil from her unsteady fingers.

QUIZ WEDNESDAY (MAYBE)

Figure 3. Example assignment for high-ability reading group in seventh-grade English

grade. We spoke with a seventh-grader who illustrated the feelings of students who faced this curriculum overlap. This girl had demonstrated mastery of seventh-grade math, and had been placed in a more advanced eighth-grade math course. She indicated the eighth grade course also was not challenging. When we inquired how she liked school, her reply was emphatic: "It's all the same: boring. If I had a choice, I'd stay home."

The survey of San Francisco Bay Area junior high, middle, and intermediate schools which was mentioned earlier, further suggests that in those schools where the faculty has attempted to eliminate this repetition of math content, a "mini-advanced placement" program is used. Students who have mastered the general math skills are enrolled in pre-algebra or algebra classes in grade 7 and Geometry in grade 8. They, then, skip these courses at the high school level. Nevertheless, even in these schools, 60 percent, or more, of the students are not provided such opportunities. As a result, they may repeat much they already know. At the same time, they may learn that math is easy and requires little time or attention in order to obtain "good grades." Later, when they move to algebra or geometry in grade 9 or 10 and face acquisition of new concepts and skills, they may have a difficult time reordering their behavior to give concentrated attention to what is being taught. They also may not devote the time and effort necessary to perform successfully in a math area that is challenging rather than "a snap."

Science is another subject area that warrants consideration, more from a lack of attention to the subject than from the simplicity of the work. Although it is listed as part of the basic curriculum in most scholarly discussions of middle or junior high schools (e.g., Klingele, 1979; Howard & Stoumbis, 1970), the San Francisco Bay Area survey indicates that science is not emphasized to the same degree as language arts, English/language arts, reading,

math, and social studies, particularly at grades 6 and 7. For example, over half the schools surveyed (55 percent) reported that students were required to take science only as part of a multidisciplinary team program or for part of the school year (i.e., one quarter or one semester). Eighteen percent of the schools offered no science classes in grade 6. Only 37 percent of the schools required a full year of science in grade 7. Forty-four percent required students to enroll in grade 7 science classes that were offered only for a semester, or one or two trimesters. Twenty-five percent offered no science. By grade 8, science had become a more important part of the curriculum. All the schools required students to take an eighth-grade science course; 86 percent required a full year of science.

These findings are of concern because students' readiness to perform successfully in the required science courses at the high school level may be limited if their junior high/middle school exposure to scientific concepts and procedures is as limited as the above data suggest. Perhaps high school teachers should be forewarned that they will need to introduce students to the study of science.

In addition to the above limitations, as suggested earlier, the work students do in junior high/middle schools seems to be made even more simple and repetitive by the ways in which the content is presented. An observer in the Lounsbury, et al. (1980) study of a day in seventh grade reported, "In many classes the material was teacher-centered, with the presenter-teacher lecturing, while the student was the absorber, not the doer. Many classes were boring and repetitious. I'm glad I'm not a seventh grader" (p. 58). Another commented:

> There were two areas that stood out most in my mind. . . The first was how much writing she [the student] did in one day. Most of it being copying things from the board.
>
> The other thing was how the role of the students in most classes was a passive role. The kids seemed

> to spend their time either reading or writing, very seldom talking or discussing. (p. 29)

A third said:

> It all puzzled me. Here is a middle school, recognized as superior. The principal is a fine administrator. . . the students are content and say they like school . . . the teachers like their jobs.
>
> Yet, I saw Marilyn -- and all the other Marilyns -- sitting through a teacher's reading the text to them . . . writing routine answers from questions at the end of the chapter or filling in the worksheets; sitting watching a film and taking notes with no discussion; listening to a teacher talking . . . doing math papers alone with the only incentive being, "Hurry up" . . . (p. 41)

A post hoc analysis of narrative descriptions of 20 days of classroom observation in the Junior High School Transition Study not only found the same types of activities underway, it also indicated that the teachers seldom stated explicitly the criteria by which the quality of the students' work would be judged. An apparent outcome of this instructional oversight was that most students thought all they were required to do was to finish the work and get it in on time. Only the high ability students realized (on their own) that correctness and quality were important. The other students complained that they did all the work and still received "D's."

The above discussion has provided a rather negative view of the work done by junior high/middle school students. However, before one assumes that such instructional activities are undesirable, it is important to re-examine the work of Epstein and his colleagues. As noted earlier, Epstein's work on brain growth cycles suggests that between ages 12 and 14 little growth occurs. Accordingly, he suggests that, at this age, students should not be given a cognitively complex curriculum. Review of previously mastered concepts and skills and completion of straightforward tasks may better suit the needs of these students than complex assignments which include new concepts and skills.

Conversely, Slavin and others at the Center for Social Organization of Schools at Johns Hopkins University have conducted several studies comparing junior high/middle school students' learning outcomes in classes where cooperative group activities were utilized with those in classes using work of the sort described above (for example, see Slavin, 1980). They found that adolescents, particularly low achievers, learn better in cooperative activities than in individualistic ones. Hence, the work completed by junior high/middle school students seems to be more than simple enough. Improvements in both what is learned and how it is learned appear to be possible and warranted.

"You Still Have Hard Homework"

Homework is an accepted feature of the junior high/middle school program. Large amounts of homework are assigned in most classes and some teachers devote large portions of available instructional time to the correction of worksheets assigned for homework the previous night. The net result, from the students' points of view is that the important questions probably arose the night before when they were doing the homework and were alone with whatever confusions and difficulties may have arisen. While such requirements may force them to develop a "facility for self-instruction" (Westbury, 1978, p. 20), a finding from the Junior High School Transition Study (Ward, et al., 1982) suggests that among the more important instructional behaviors related to successful student performance in junior high school was the teacher's willingness to make himself or herself available to answer students' emergent questions and provide immediate academic feedback. Strict reliance on worksheets completed at home, and the consequent lack of appropriately timed academic feedback and explanation, thus may hinder students' performance in junior high school. The goal of encouraging students to be autonomous learners, although important, may not be best pursued by turning homework into instructional prime time.

"Your [sic] Still Around Kids"

Asked about the similarities between sixth and seventh grade, one student wrote, "Your [sic] still around kids." Junior high and middle school classrooms -- like those of elementary school and high school -- are "social-instructional systems" (Tikunoff & Ward, 1978) within which a single teacher (usually) is charged with managing and instructing approximately 30 students. Because a classroom contains numbers of students, it functions as a "mass processing system" (Doyle, 1977) which accommodates the preferences, abilities and moods of students in a cumbersome fashion at best. To complete the assigned work, students are expected to work undistracted and alone in a crowd which contains -- at the least -- a group of acquaintances, and more frequently, their best friends. As one seventh grader wrote about his junior high school experience, "You can see your friends all day in school."

Working in close proximity to one's buddies, or often, the object of one's budding affections, requires students to deny powerful urges to socialize. Although Jackson (1968) is commenting about elementary students in the following excerpt, his point is even more poignant because of the exaggerated impulsions to socialize associated with the emotional and physiological changes of adolescence:

> . . . students must try to behave as if they were in solitude, when in point of fact they are not. They must keep their eyes on their paper when human faces beckon . . . . (pp. 16-17)

Thus, performing well in junior high/middle school requires students to develop social competencies as well as academic or cognitive competencies. By social competencies we mean the abilities necessary for students to interact successfully with the teacher and with other students in the classroom. Such competencies enable a student to engage in and withdraw appropriately from communication with other individuals, and to make sense of the formal and

informal messages which occur in such interactions. Since many social requirements are created by the ways in which students do assigned tasks, as outlined above, one social competency essential for successful classroom participation is that of acting as if one were completing assigned tasks in a lonely library carrel rather than the crowded confines of the classroom. The ringing impatience of thousands of teachers testifies to the importance of this competency: "Keep your eyes on your own paper!" "Don't talk to your neighbor!" "No side conversations." "Let's have all eyes up front!" Although students are expected to learn in a group of their peers, the learning process itself is strictly an individual affair, and students are expected to be able to ignore the presence of other youngsters when doing so.

Given that classrooms include large numbers of individuals, students also may be required to learn to work constructively with other students and concentrate on group-oriented as well as individually oriented learning goals. Skills such as carrying on a serious group discussion, communicating ideas orally to one another, or providing academic help and tutoring to others who are confused may be required of students when they engage in cooperative group tasks. In addition, cooperative learning strategies, which require students to work together in order to complete academic tasks, are associated with a number of social benefits. After conducting several lengthy reviews of the literature, Johnson (1980) concludes:

> There is considerable evidence that cooperative experiences, compared with competitive and individualistic ones, result in more positive interpersonal relationships characterized by mutual liking, positive attitudes toward each other, mutual concern, friendliness, attentiveness, feelings of obligation to other students, and a desire to win the respect of other students. (p. 139)

Moreover, Johnson argues that cooperative learning arrangements, when compared with individualistic and competitive learning structures, are equally

effective in promoting academic achievement. Because junior high and middle schools are charged not only with educating the intellect, but with developing a social being who is able to work with others and contribute to the social good, we question whether the near total disregard of cooperative learning strategies that was described in the previous section may impede the develoment of social competencies necessary for a productive adult life.

Blyth, Simmons, and Bush (1978) look at students' relations with one another from a different perspective. They point out the importance of friends as the individuals with whom adolescent girls, in particular, prefer to associate. They also indicate that in junior high schools younger boys have about a 50 percent chance of being victimized by older boys. They note that a majority of junior high school students feel that neither students nor teachers know them well. Perhaps as a result of these factors, one impact of transition to junior high school for the students they studied was a decline in self-esteem for girls. No change was reported for the boys. Thus, being around large numbers of unfamiliar students may not necessarily promote positive growth and development for adolescents who are undergoing a wide range of physical, emotional, intellectual, and social changes.

"The Teachers Are Sort of the Same"

Thus far, we have discussed the work students do and the skills they need to apply in order to do that work in a classroom setting which includes 30 or so students and a teacher. This section discusses several additional skills students must utlize to participate optimally in a junior high/middle school class. It is titled, "Teachers Are Sort of the Same," because the skills that are required result from the ways in which teachers organize learning tasks. Therefore, the discussion centers around the classroom conditions that require

students to learn to wait, to raise their hands to answer questions, and so forth. Information follows later regarding specific teacher behaviors that facilitate the learning of junior high/middle school students.

Junior high/middle school students who participate optimally in classroom activities give the appearance that they are spending their time constructively either by watching the teacher or carrying out relevant academic tasks. Classroom conditions, however, do not necessarily support such engagement. For many students, much of classroom life is spent marking time and waiting to be recognized by the teacher, or to have a question answered, or for the bell to ring. Students work at different speeds and finish their assignments at different times. Teachers' comments which clarify the confusion of the least able student in the class may bore the more able. Occasionally, the resources needed to complete an assignment (a dictionary, say) must be shared among several students. In situations such as these, students must accept delay in an appropriate fashion.

Moreover, competent students do not disrupt the teacher's instructional agenda. As Boocock (1973) has remarked:

> The "good" student listens to the teacher, follows instructions, does not disturb the class by talking out of turn, and is otherwise receptive to <u>being taught</u>. (p. 24) [emphasis in text]

In addition, based on the procedures the teacher puts into operation, students need to learn skills such as how to get the teacher's attention in acceptable ways, when it is acceptable to talk with other students and when it is not, whether or when it is okay to sharpen a pencil during class, and how to state what they know so it will be acceptable to the teacher.

Our study of students' transition to junior high school suggests that the participation requirements of the junior high school are similar to those in the elementary school. In fact, the elementary teachers were found to use a

more diversified set of instructional procedures across a typical school day than were used in the six-period seventh-grade day. Thus, the in-class participation requirements of the junior high school may be less demanding than those they experienced in elementary school. (See Rounds, et al., 1982.)

In terms of preparation for high school, two participation demands of junior high/middle school classes are particularly relevant. These are time management requirements imposed by the teacher and the extent to which the teacher gives students responsibility for designing projects and other learning tasks.

The junior high school teachers we observed placed two types of time management requirements on students. Several teachers distributed assignment sheets that contained a list of tasks, activities, and/or projects, which were to be completed over several days, sometimes two or three weeks. The students were expected to pace their work so the assignments were completed on time. Some teachers specified when various parts of the assignments were to be completed; others left the students to schedule their own work. As might be expected, students who had had experience in elementary school with assignments that spread over several days adjusted to these requirements better than those who had not. By the end of the Fall Quarter of seventh grade, some students were still "playing around" at the beginning of the assignment period, leaving too much work to be done in the last day or two. Unfortunately, at no time did we observe teachers providing the students with formal instruction in how to pace the work. The few teachers who were concerned about students' time management skills broke the long assignments into smaller pieces and specified due dates for each part but they did not explain why they had done so to the students.

Further, our experience in junior high school classrooms suggests that rarely, if ever, were students held responsible for designing their own assignments. They were expected to follow the teacher's curriculum rather than modifying, extending, or proposing alternate learning activities. The self-initiated, self-directed learning activities we (and numerous authors in the field of middle school education) envision as being potentially important for adolescents did not occur. While we agree that independently developed work should be conducted under the direct supervision of teachers who can answer emergent questions, monitor, offer encouragement and suggestions and, if necessary, indicate when a student is moving in an inappropriate direction, our concern is that research conducted to date suggests that the opportunities given adolescents to complete significant, independent work are few. Hence, they may be expected to enter high school unprepared to take on such responsibilities.

An aside to this discussion, but nonetheless an important part of the students' junior high/middle school experience, is the fact that the need to move from classroom to classroom, the interactions with others that occur in the locker area, and the bringing together of students from a large number of elementary schools make the out-of-class participation requirements of the junior high school complex. Many students in our study reported that this was the more interesting and challenging feature of the transition to junior high school. Merely finding classes was problematic initially. Locating lockers and avoiding unpleasant encounters with other students in the locker area was a worrisome part of the students' entry to junior high. Becoming acquainted with students from six elementary schools demanded "bravery" as well as "social know-how." Interestingly, the junior high school we studied applied no particular time or effort to instruction in this aspect of junior high school life even though it obviously was related to the students' success in school.

"The Teachers are Stricter"

The above discussion has emphasized the instructional aspects of the students' junior high/middle school experience. This section stresses the adult authority and discipline aspects. As Willard Waller (1932) observed half a century ago:

> The teacher pupil relationship is a form of institutionalized domination and subordination. Teacher and pupil confront each other in the school with an original conflict of desires, and however much that conflict may be reduced in amount, or however much it may be hidden, it still remains. The teacher represents the adult group, ever the enemy of the spontaneous life of groups of children. The teacher represents the formal curriculum, and his interest is in imposing that curriculum upon the children in the form of tasks; pupils are much more interested in life in their own world than in the dessicated bits of adult life which teachers have to offer. (p. 195-6)

For most adolescents, competent classroom participation involves a balancing act, during which students learn to play to one audience while disguising their behavior from the other. To maintain status among their peers, for example, many students may feel they have to challenge the teacher's authority. At the same time, if students are to maintain their academic status, these challenges cannot go too far. Successful students do not totally alienate teachers; they learn when and how to balance the expectations of the teacher and their peers and court the approval of both parties.

Such skills include the ability to "psych out" the teacher, and determine whether a challenge to the teacher's legitimate authority will be met with good-natured humor or immediate discipline. The ability to make this challenge while not appearing to do so is also important. Consider, for example, the following incident observed by Mary Metz (1978) during her study of authority in two desegregated junior high schools. Metz's analytic comments appear in parentheses.

> Earlier Guy, a very big black boy seated in the back, was out of his seat. Mrs. Theobold told him to sit back down and asked rhetorically, "Do you wonder where your points go?" He replied, with only the slightest edge of irony in his tone, "Yeah, where?" Mrs. Theobold didn't understand, asking him to repeat. He did. I think she just gave a straightforward answer.
>
> (Guy thus came to the near edge of mocking her, but by using a rather factual tone, stayed clear of it. She kept control by treating the question as serious and passing over it quickly. Thus there was a kind of stand off, with each keeping face. Guy questioned her definition of the situation publicly, but didn't push it; she refused to understand his questioning of it, and he allowed her to misunderstand him . . .)
>
> (Incidents like this are often so minor that I don't notice their significance, or not totally, at the time. It is only in looking back that I see how important they are. These duels of definition or for status occur in a matter of one or two seconds and scarcely ripple the surface of the main interaction and yet they are very significant.)
> [pp. 137-138]

Hence, to the extent that they are organized as mass processing systems directed by a teacher, junior high/middle school classrooms provide arenas where successful students attempt to accomplish their own peer-directed activities at the same time they appear to comply with teachers' directives. Moreover, many students either because of personal motivations or peer allegiances challenge the role, demeanor, and prerogative of the teacher.

It should be noted, somewhat ironically, that in order to encourage students' ability to dissemble the true nature of their inappropriate behavior, the teacher must be at least minimally successful in maintaining classroom order. If the teacher is a poor manager, chaos -- rather than a stand off -- will result. Here is an excerpt from the Junior High School Transition Study (Rounds, et al., 1982) which portrays a classroom in which students' challenges were met with an inadequate teacher response.

> When the bell rings, the class becomes quiet until one student starts coughing. The coughing spreads throughout the room. One person coughs and then the next coughs

so that the coughing just spreads. The teacher offers a mild reprimand, "Let's quiet down. Let's be quiet."

Then the student in the second seat next to the windows yells, "What's that terrible smell?"

A student on the other side of the room near the door answers, "Someone farted."

At that point, the teacher suggests the class get to work and passes out some worksheets. While he's making the announcement, whistling and talking go on around the room. One student wads up some paper and throws it out the window. Someone else sharpens a pencil.

A girl across the room from the pencil sharpener yells, "Will someone over there sharpen this pencil for me?" and throws her pencil across the room.

The teacher says, "I wonder if we are going to have to send someone out? The minute you disturb this class, out you go."

The noise from the students continues. One student starts singing the "Star Spangled Banner," and several others join in. Next, someone starts with the "Pledge of Allegiance." Everyone picks that up until it has gone around the room.

In the Transition Study most teachers established specific rules and expectations. They enforced them consistently with sanctions focused on the individuals who failed to participate appropriately. These classrooms functioned with a semblance of order that allowed instruction to proceed. Being "stricter" appeared to be necessary. As illustrated above, in those rare classes where the teacher was not "strict," the students set the standards and wrenched the authority from the teacher.

Effective Teaching in Junior High/Middle School

The above sections have described the context in which junior high/middle school education is placed, including the unique characteristics of the students served, the historical beginning of these "in between" schools,

and the differences in middle schools and junior high schools as presented in the philosophical rhetoric underpinning the middle school movement. The academic and social requirements placed on students in junior high/middle schools also have been discussed. In this section, we now address the fact that some junior high/middle school teachers are more effective than others in terms of their ability to teach adolescents. The question of what effective junior high/middle school teachers do is pursued.

As is true for the literature on junior high/middle schools in its entirety, there is very little empirical data from which to draw conclusions about what teaching is like in junior high/middle schools. An accumulation of basic descriptions about the teaching in a variety of junior high/middle schools does not even exist. Given this background, this portion of the paper will rely largely on two sources. The first is the large-scale and impressively comprehensive study of junior high schools that was directed by Carolyn Evertson at the Research and Development Center for Teacher Education at the University of Texas at Austin (see, for example, Evertson, Anderson, Anderson, & Brophy, 1980; Evertson, Sanford & Emmer, 1981; Sanford & Evertson, 1981). Evertson's work not only provides basic descriptive information about the normative instructional practices of English and mathematics teachers in a large urban school district, it also illustrates the range of individual differences among teachers in their instructional practices and which kinds of practices appear more suitable. The second source for what follows is the in-depth descriptive study of eleven seventh-grade teachers in one suburban junior high school that was conducted by the Far West Laboratory as part of the Junior High School Transition Study (see Rounds, Ward, Mergendoller & Tikunoff, 1982). This study corroborates the Evertson work both in terms of what is typical instructional practice and the kinds of variation that can

be found among teachers. The discussion that follows stresses the effective teaching strategies that were identified in these studies.

Patterns of More and Less Effective Teaching in Junior High School

The question of appropriateness of junior high school teaching is both organizational and behavioral. First, one can question whether the general instructional organization of teaching in junior high school is appropriate. Second, one can ask what specific teaching behaviors are most appropriate. Here, one can anticipate that teachers fall on a distribution of effective teaching behaviors, where teachers at the top end of the spectrum exhibit greater quantities of those behaviors and thus are more effective than teachers in the middle and lower portions of the distribution. For example, research at the elementary level has shown that effective teaching is often characterized by above-average amounts of task-oriented behavior, contributing to a pattern called "direct instruction." On the one hand, it may be that what works well in elementary school is inherently inappropriate in junior high school because of students' biological growth and differences in the curriculum. On the other hand, it is possible that many characteristics of effective teaching are universal across grade levels and subject areas, or that students at least prefer these methods during the period of junior high school, when social concerns take new precedence.

The Evertson work tackled the question of effectiveness at the junior high school level in two ways: 1) by a traditional process-product correlational approach, with adjusted class achievement and attitudes toward teachers serving as outcomes; and 2) by comparisons of descriptions of more and less effective classroom managers (teachers), where effectiveness was defined by multiple criteria, including adjusted class achievement, students' ratings

of teachers, observer ratings of teacher management, and average percentages of student academic engagement.

Based on the process-product approach, Evertson, Anderson, Anderson, and Brophy (1980) reported that a pattern of effective teaching was easier to determine for mathematics classes than English classes. More effective math teachers were found to be more active, organized, and academically-oriented. They spent more time in class lecture and discussion and relatively less time in seatwork, and their discussion periods were marked by asking students many questions. These teachers also were found to be more effective class managers and more able to prevent discipline problems. Finally, these teachers were rated by students as being more enthusiastic, nurturant, and affectionate. In sum, effective math teachers followed the basic tenets of direct instruction, in addition to satisfying students' emotional needs.

No clear pattern of effective teaching emerged for English classes as a whole, although some correlates of effective teaching, measured by students' attitudes, were identified for lower ability English classes. Here, students preferred what seemed to be a less demanding academic situation, with teachers minimizing class discussions and public questioning and devoting more time to individualizing instruction and private contacts. Correlates of effective teaching for high ability English classes were not clearly identified.

Emmer and Evertson (1980) identified 13 more effective English and math teachers and 13 less effective junior high school English and math teachers based on a definition that combined student performance on several outcome measures. Narrative descriptions of these teachers were compared to identify differences in classroom management techniques that the two groups used at the beginning of the school year. It should be noted that in looking at the

more effective teachers, Emmer and Evertson were describing approximately the top 25 percent of their sample. Conversely, the less effective teachers represented approximately the bottom 25 percent of the sample. The authors were able to identify five broad management themes which differentiated between the more and less effective teachers.

The first theme addressed how the teachers taught their students rules and procedures. More effective and less effective teachers spent approximately the same amount of class time teaching rules and procedures, but more effective teachers were more successful in getting the rules and procedures across to students clearly and more successful in coming up with and enforcing rules and procedures to handle complex situations.

The second theme concerned teacher monitoring of student compliance with rules and procedures. Compared with less effective teachers, more effective teachers referred to their rules and procedures more frequently, ignored disruptive behavior less, and were more consistent in their behavior management. More effective teachers also tended to carry through with the prestated consequences for a violation of a rule more often than less effective teachers.

The third theme involved maintaining student responsiblity for work. More effective teachers made more effort to see that students got a good start carrying out activities, that students kept progressing, and that students completed assignments. This often was facilitated by giving students daily assignments that teachers collected daily and checked or graded quickly. These teachers also tended to have a work system so that students understood how each assignment was related to their grade. In contrast, students in classes of less effective teachers were not given assignments on a regular basis and their work was not monitored as well or subject to a regular checking/grading routine.

The fourth theme had to do with how teachers communicated information. More effective teachers gave clearer directions, stated objectives, and established routines for communicating assignments. These teachers also were better able to communicate their behavioral expectations to students, and they helped students comprehend and complete tasks -- for example, by breaking down complex tasks into step-by-step procedures. The difference between more and less effective teachers on this theme was especially salient for English teachers, where the curriculum was less linear.

The fifth theme concerned organizing instruction. Emmer and Evertson found that while more and less effective teachers were similar in that they rarely gave differentiated assignments, more effective teachers carried out their instruction with less wasted time, interacted more in a whole-class format, and were better able to challenge higher achieving students (e.g., with extra-credit problems) than less effective teachers.

In a similar comparative study, Worsham and Evertson (1980) examined in greater depth how junior high school teachers maintained student accountability for written work (related to the third theme above). Based on comparisons of seven more effective English teachers and seven less effective English teachers, the authors identified five dimensions that distinguished between the accountability systems of more and less effective teachers.

First, more effective teachers were more clear about all aspects of work requirements than less effective teachers. This was accomplished by setting specific requirements for a paper's form (e.g., how to head papers), neatness, completeness, due date, and make-up procedures. Second, more effective teachers had better procedures for communicating assignments and instructions than less effective teachers. For example, more effective teachers not only gave clear directions but tended to launch into work as soon as the period began

and to have students keep their own assigment records in their notebooks. In contrast, less effective teachers often gave insufficient directions or found themselves giving directions to inattentive students. The third distinguishing feature of the accountability system of more effective teachers was that they had procedures for monitoring and encouraging students once students started working, e.g., by physically walking around the room and checking off student work in their gradebook. In contrast, less effective teachers tended not to monitor students once they had stared working. Fourth, more effective teachers established consistent routines for turning in and checking work. Work was always handed in to a clearly designated spot so that it could be checked or recorded. Less effective teachers tended not to employ routines to assure that work was always checked nor did they require students to turn in their assignments regularly. The final dimension of the work accountability system of more effective teachers was that they provided students with regular feedback. This was accomplished both by assigning grades to papers and by class discussion of answers. Less effective teachers did not use these practices as consistently, and sometimes there was no opportunity to use them because papers were not turned in or checked.

In sum, the comparative descriptions of more and less effective junior high school teachers as analyzed by Evertson and her colleagues indicate that the top quarter of the distribution of teachers carries out instruction using a number of systematic and consistent procedures that minimize ambiguity and assure that students are cooperative and on-task. Thus, students enter these classes each day knowing the parameters of expected behavior, knowing their assignments, and knowing they will be held accountable for doing their work. At the other end of the distribution, there appear to be teachers who have minimal sets of procedures and often are unable to communicate or enforce

these procedures consistently. Students, then, enter these classes knowing that there are no consistent limits on their behavior, not understanding their assignments clearly, and not knowing whether the teacher will even bother to monitor or check their work. Presumably, the majority of teachers fall somewhere in between these two extremes.

The Far West study of eleven junior high teachers (Rounds, et al. 1982) identified four general charactertistics that differentiated between the more and less successful teachers in the school, where success was judged on the basis of students' use of academic time, their grades in the various classes, their adherence to classroom rules and norms, and their relations with their peers.

The more successful teachers made themselves accessible to their students, providing them with help on their assignments and giving them regular feedback and reinforcement. These teachers usually engaged in frequent monitoring and physical movement about the classroom. In contrast, there were a few teachers who refused to help students (e.g., sat at their desks and ignored raised hands) or provided feedback that was virtually useless (e.g., "Yes, that's wrong"). The more successful teachers also gave clear directions and explanations, whereas less successful teachers did not. The more successful teachers not only stressed the coverage of course content, but they also made efforts to encourage student interest in the subject matter. In contrast, less successful teachers either did not stress content coverage or they stressed content coverage without taking student interest into account. Finally, the more successful teachers established classroom rules and norms, and they worked to maintain them. In addition, these teachers focused disciplinary actions on the specific individual(s) who violated the rules and norms. Less succussful teachers did not have functioning rules

and norms and their disciplinary actions often consisted of empty threats directed at the class as a whole (e.g., "I wonder if we are going to have to send someone out? The minute you disturb the class, out you go."). These four general characteristics overlap nicely with the Evertson work.

In sum, the findings on patterns of more and less effective teaching in junior high school do not really challenge the instructional framework that was discussed earlier -- undifferentiated assignments and periods filled by teacher recitation, discussion, and seatwork. Instead, it appears that, within this basic framework, teachers display a range of specific managerial and instructional behaviors whereby some teachers seem to encourage students' progress while others appear to discourage it. These individual differences among teachers often can be quite striking. In general, the more effective teachers get students prepared for instruction with a workable set of rules and procedures, communicate information and assignment expectations clearly, make students accountable for frequent assignments, monitor students during work, and provide help and feedback on a regular basis. By stating these general characteristics, it should not be assumed that the same set of teaching behaviors is optimal for the entire package of subject matters and electives found at the junior high school level. What works best in the more multifaceted curriculum areas like English may depend to a large extent on the ability composition of the class. Certainly, this is an area that begs further investigation.

Teaching in the Middle School

The research that was just reviewed was conducted in junior high schools, and, thus, there is some question regarding the extent to which those findings are generalizable to middle schools. Certainly, there is no question that middle school proponents advocate forms of instructional organization

and teaching that vary from what has been described thus far. Several quotes taken from Lounsbury, Marani, and Compton (1980) suggest how different the middle school outlook can be:

> . . . extensive and varied materials should be employed, some commercially produced, others teacher-made, and still others made by the students themselves. Classroom sets of a single textbook are seldom needed at the middle school level. (p. 15)

> The nature of the middle school student necessitates an instructional approach which leads to personalized assignments and activities. There may be times when the student needs to work alone . . . At other times the activity may lend itself to working in groups of two, three, or four. In still other instances the optimal group may be as large as 150. (p. 16)

> Teaching in an integrated program for active early adolescents should be more nondirective and action-oriented than in schools for younger children. The diversity of student interests and needs at the middle school level also demands that many topics be student-generated as well as student-implemented. (p. 16)

> Perhaps the curricular area most vital to the developmental needs of early adolescence is that of health education. (p. 15)

The question to ask about this middle school rhetoric is whether or not middle schools actually follow practices like those espoused above. Lounsbury, et al. (1980) provide descriptions of student life in several exemplary middle schools which suggest that many of the practices have been adopted. As stated previously, however, they also provide examples of classrooms where such practices are not followed.

Conclusions

In closing, we wish to summarize our thoughts and emphasize a self-evident but nonetheless important theme that has run throughout this discussion. Students' experiences in junior high/middle schools depend on three aspects of the instructional program: (1) the nature of the academic tasks students must complete; (2) the social-organizational structure of the classroom; and (3)

the management and accountability system employed by the teacher. What students learn in the classroom is based on the interaction of these three factors (c.f., Tikunoff & Ward, 1978; Blumenfeld, Mergendoller & Swarthout, 1982). To a large extent, teachers, given appropriate training and material support, can manipulate these factors and change their classrooms into environments that facilitate students' development of certain skills and impede others. The information presented here suggests that, in classrooms where effective teachers are functioning, students develop a wide range of academic and social skills that prepare them for the move to high school. The students also become active participants in the learning process. However, in general, the cognitive complexity of the tasks assigned to junior high/middle school students appears to emphasize a fact-recall, fill-in-the-blank, and rote learning approach. Further, with the exception of the most able students, who may be placed in advanced classes covering new subject matter, the mathematics curriculum completed by most seventh-grade students includes a considerable portion of skills and concepts the students already learned in grades 5 and 6. In addition, many junior high/middle school students enter high school with limited science backgrounds and with minimal experience in selecting appropriate courses from a list of electives.

On the other hand, because entry to junior high/middle school places students in an instructional setting where they are required to work with more teachers than in elementary school and interact with a large number of students they have not known previously, complex social skills are required of junior high/middle school students. Adolescents' success in these schools results -- in part -- from appropriate use of a wide range of classroom participation skills in addition to their academic skills. How to (a) get the teacher's attention, (b) answer questions appropriately, (c) manage time, (d) plan projects,

and (e) interact with one's peers in an acceptable manner are among the skills that must be learned and applied in each classroom. Because each teacher establishes an instructional-social system that differs in subtle or not-so-subtle ways from those of other teachers, a junior high/middle school student must decode and respond to a wide array of participation requirements. This is the case even when the basic instructional format is the same across all classes, e.g., lecture, recitation, and seatwork. Not until a student leaves high school and enters college or the work force will he or she face situations requiring similar increases in social participation requirements.

Obviously, junior high/middle school education has strengths and weaknesses. One strength revolves around the ways in which schools are providing instructional programs that phase in the move to a departmentalized program -- as carried out in high school -- from an elementary program based on self-contained classrooms or team-teaching of two or three subjects by a similar number of teachers. Another strength is the effective teachers who are found in these schools. The same student will be more successful in an effective teacher's classroom than he or she is in the classroom of a teacher who does not employ the effective teaching strategies discussed above. A composite of three to six effective teachers per day should provide a student with a more stimulating and less passive experience than is typical for most junior high/middle school students. A third strength is the emphasis upon a core set of subjects that build the students' basic reading, writing, and math skills. Continued development of these skills in junior high/middle school helps students establish a strong base for carrying out the academic tasks they will be expected to perform in high school.

The weaknesses in the program center around the repetitiveness of both instructional procedures and content, the limited experience students appear to be given in selecting elective courses, the lack of cooperative learning experiences, and the lack of attention to teaching -- explicitly -- such skills as time management, question asking, peer tutoring, and project planning. A more diverse and cognitively complex program not only might increase students' interest in the junior high/middle school curriculum, it also might better prepare them for high school. Further, explicit attention to participation skills such as those discussed earlier might increase students' capacity to understand and function in a variety of complex social and organizational settings, both at the high school level and in the adult world.

Although the typical junior high/middle school experience encountered by students may not be all that we want it to be, the above discussion suggests some schools, and even more teachers, offer instructional programs that come close to providing the desired learning experiences. In addition, several avenues for improving the learning experiences that are offered to the early adolescents and adolescents who attend junior high/middle schools have been identified, and can be pursued by educators committed to providing educational excellence for the "in-betweenager."

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